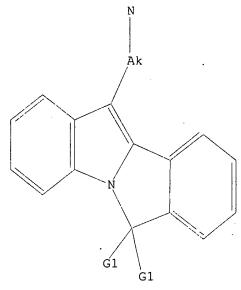
11/01/2006

L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS

L1 STR



G1 H, Me, Et, n-Pr, i-Pr

Structure attributes must be viewed using STN Express guery preparation.

=> s l1 full

FULL SEARCH INITIATED 18:29:32 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 95322 TO ITERATE

100.0% PROCESSED 95322 I SEARCH TIME: 00.00.02

95322 ITERATIONS

SHARCH TITHE. OO. OO. OZ

62 SEA SSS FUL L1

=>

L2

Uploading C:\Program Files\Stnexp\Queries\10518624\2.str

62 ANSWERS

ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 8-10 9-12 10-11 10-13 11-12
11-16 13-14 14-15 15-16
exact/norm bonds:
5-7 6-9 7-8 7-17 8-9 8-10 9-12 11-12 17-18
normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-13 11-16 13-14 14-15 15-16
isolated ring systems:

G1:H,CH3,Et,n-Pr,i-Pr

Match level :

containing 1 :

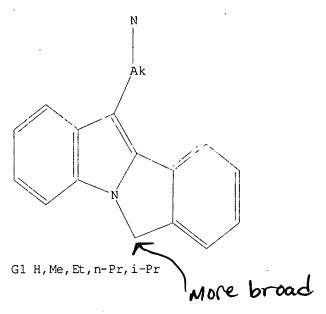
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 13 full

FULL SEARCH INITIATED 18:30:09 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED -95322 TO ITERATE

100.0% PROCESSED

95322 ITERATIONS

SEARCH TIME: 00.00.02

103 SEA SSS FUL L3

=> fil caplus

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE

TOTAL

03 ANSWERS

ENTRY 333,88

SESSION 334.09

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They are available for your review at:

http://www.cas.org/infopolicy.html

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L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
140:77024
Preparation of tetracyclic arylalkyl indoles having serotonin receptor affinity
Jasti, Venkateswarlu: Ramakrishna, Venkata Satya Nirogi; Kambhampati, Rama Sastri; Battula, Srinivasa Reddy: Rao, Venkata Satya Vecrabhadra Vadlamudi
Suven Pharmaceuticals Ltd., India
SOURCE:
PATENT ASSIGNEE(S):
SOURCE:
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
DAMGUAGE:
PATENT ASSIGNEE SI Patent
LANGUAGE:
PATENT ASSIGNEE SI PAT
                                                                                                                                                                                            Instant App.
                                                                                                                   English
   DOCUMENT TIPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                         PATENT NO.
                                                                                                                    KIND DATE
                                                                                                                                                                                       AII 20031231
AM, AT, AU, AZ,
CZ, DE, DK, DM,
ID, IL, IN, IS,
LV, MA, MD, MG,
RV, SD, SE, SG,
VN, YU, ZA, ZM,
LS, MM, MZ, SD,
RU, TJ, TM, AT,
GG, HU, IE, IT,
CG, CI, CM, GA,
AI 20040106
AI 20050405
AI 20050608
DE, DK, ES, FR,
LV, FI, RO, MK,
A 20050931
TZ 2005012
AI 20050931
M, AZ, BY,
K, EE, ES,
I, SK, TR,
N, TD, TG
20030619
20030619
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E, MC, PT,
U, SK
20030619
20030619
20030619
20030613
20020621
                                                                                                                                                                                                                                                                                                                    20030619
OTHER SOURCE(S):
                                                                                                                   MARPAT 140:77024
                       ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
                                                                                                                                                                                                                                                                                (Continued)
                        639808-61-0 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanamine, N,N-dimethyl- (9CI) (CA INDEX
                                                            н2-сн2-мме2
                       639808-62-1 CAPLUS 6H-Isoindolo{2,1-a}indole-11-ethanamine, 2-chloro-N,N-dimethyl- (9CI)
                                                            н<sub>2</sub>-- сн<sub>2</sub>-- мме<sub>2</sub>
                        639808-63-2 CAPLUS
6H-Isoindolo[2,1-a]indole-11-ethanamine, 2-chloro-N,N-dimethyl-,
hydrochloride (9CI) (CA INDEX NAME)
                                                          H2-CH2-NMe2
                                        ●x HCl
                        639808-64-3
                        639808-64-3 CAPLUS
6H-Isoindolo[2,1-a]indole-11-ethanamine, 2-chloro-N,N-dimethyl-,
(22)-2-butenedioate (9CI) (CA INDEX NAME)
                        CRN 639808-62-1
CMF C19 H19 C1 N2
```

```
10 NR13R14
                                                    CR11R12|n
                    The title compds. [I; RO = H, alkyl; Rl-Rl2 = H, halo, oxo, thio, etc.;
                     the adjacent groups like R1 and R2, etc. together with carbon atoms to which they are attached may form 5-7 membered ring which may further contain one or more double bonds and/or one or more heteroatoms such as
                     N, S or Se; or R9 and R10 or R11 and R12 together with the carbon atoms
                     which they are attached may form a 3-6 membered ring which may further contain one or more double bonds and/or one or more heteroatoms such as
                which they are attached may form a 3-5 membered ring which may futher contain one or more double bonds and/or one or more heteroatoms such as N, S or Se; R13 and R14 = H, alkyl, cycloalkyl, aryl, etc.; or NR13R14 = 3-7 membered heterocyclyl; n = 1-8], useful for treating conditions where a modulation of 5-HT and/or serotonin activity is desired (no data), were prepared Thus, reacting 1-(2'-bromobenzyl)-N,N-dimethyltryptamine with N,N-dimethylacetamide in the presence of Pdcl2[P(c-tolyl)13]2 and AcoK afforded 11-(2-N,N-dimethylaminoethyl)-6H-isoindolo[2,1-a]indole. This invention also relates to processes for preparing the compds. I, compns. containing effective amts. of the compound I and the use of such a sound/composition in therapy.

639808-61-0P 639808-62-1P 639808-63-2P 639808-61-6P 639808-63-P6 639808-65-P6 639808-67-P6 639808-68-P7 639808-76-P6 639808-76-P6 639808-76-P6 639808-76-P6 639808-76-P6 639808-76-P6 639808-74-5P 639808-72-8P 639808-77-BP 639808-77-BP 639808-77-BP 639808-77-BP 639808-77-BP 639808-81-P6 639808-81-P6
(vses) (preparation of isoindolo[2,1-a]indoles having serotonin receptor affinity)
                   ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
                                                                                                                                                                                                                                                  (Continued)
                                                                  CH<sub>2</sub>
                    СМ
                                  . 2
                     CRN 110-16-7
CMF C4 H4 O4
Double bond geometry as shown.
                    639808-65-4 CAPLUS
                     Butanedioic acid, hydroxy-, compd. with 2-chloro-N,N-dimethyl-6H-isoindolo[2,1-a]indole-11-ethanamine (9CI) (CA INDEX NAME)
                                 1
                    CM
                    CRN 639808-62-1
CMF C19 H19 C1 N2
                                                 сн<sub>2</sub>-сн<sub>2</sub>-мме<sub>2</sub>
                                       2
                    CM
                      639808-66-5 CAPLUS
6H-Isolndolo[2.1-a]indole-11-ethanamine, 2-chloro-N,N-dimethyl-,
ethanedioate (9CI) (CA INDEX NAME)
```

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN CRN 639808-62-1 CMF C19 H19 C1 N2 (Continued)

639808-67-6 CAPLUS
6H-Isoindolo{2,1-a}indole-11-ethanamine, 2-chloro-N,N-dimethyl-,
2-hydroxy-1,2,3-propanetricarboxylate (9CI) (CA INDEX NAME)

CRN 639808-62-1 CMF C19 H19 C1 N2

СМ

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) 639808-72-3 CAPLUS 6H-Isoindolo(2,1-alindole-11-ethanamine, 2-bromo-N-cyclopropyl-N-methyl-(9CI) (CA INDEX NAME)

639808-73-4 CAPLUS 6H-Isoindolo{2,1-a]indole-11-ethanamine, 4-chloro-N,N-dimethyl- (9CI)

INDEX NAME)

639808-74-5 CAPLUS 6H-Isoindolo(2,1-a)indole-11-ethanamine, 3,4-dichloro-N,N-dimethyl- (9CI) (CA INDEX NAME)

639808-75-6 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanamine, 1-chloro-N,N,4-trimethyl- (9CI) (CA INDEX NAME)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

639808-68-7 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanamine, 2-fluoro-N,N-dimethyl- (9CI)

INDEX NAME)

RN 6350 CN 6H-ISO INDEX NAME) 639808-69-8 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanamine, N,N,2-trimethyl- (9CI) (CA

639808-70-1 CAPLUS
6H-Isoindolo(2,1-a]indole-11-ethanamine, 2-methoxy-N,N-dimethyl- (9CI)
(CA INDEX NAME)

639808-71-2 CAPLUS 6H-Tsoindolo(2,1-alindole-11-ethanamine, 2-bromo-N,N-diethyl- (9CI) (CA INDEX NAME)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

639808-76-7 CAPLUS 6H-Isoindolo(2,1-a)indole-11-ethanamine, 3-chloro-N,N,4-trimethyl- (9CI) (CA INDEX NAME)

RN 639808-77-8 CAPLUS CN 6H-Isoindolo[2,1-a]indole-l1-ethanamine, N,N-dimethyl-4-(trifluoromethyl)-(SCI) (CA INDEX NAME)

639808-78-9 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanamine, 2,4-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

639808-79-0 CAPLUS 6M-Isoindolo[2,1-a]indole, 11-[2-(1-pyrrolidinyl)ethyl)- (9CI) (CA INDEX Page 9 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN NAME) (Continued)

639808-80-3 CAPLUS 6 6H-Taoindolo[2,1-a]indole, 2-bromo-11-[2-(1-pyrrolidiny1)ethy1]- (9CI) (CA INDEX NAME)

639808-81-4 CAPLUS 6H-Isoindolo(2,1-a]indole, 11-(2-(1-piperidinyl)ethyl)- (9CI) (CA INDEX NAME)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

639808-85-8 CAPLUS

GH-Isoindolo[2,1-a]indole-11-ethanamine, 4-ethyl-N,N-dimethyl- (9CI) (CA INDEX NAME)

CH2-CH2-NMe2

639808-86-9 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanol, α -(dimethylamino)- [9CI) (CA INDEX NAME)

639808-87-0 CAPLUS 6H-Isolndolo(2,1-ajindole-11-ethanamine, 4-methoxy-N,N-dimethyl- (9CI) (CA INDEX NAME)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

639808-82-5 CAPLUS 6H-Isoindole, 11-{2-{4-methyl-1-piperazinyl}ethyl}- {9CI} (CA INDEX NAME)

639808-83-6 CAPLUS 6H-Isoindolo $\{2,1$ -a $\}$ indole-11-methanol, α - $\{2$ - $\{1$ -pyrrolidinyl $\}$ ethyl $\}$ - $\{9$ CI) (CA INDEX NAME)

639808-84-7 CAPLUS 6H-Isoindole(2,1-a)indole-11-methanol, 2-bromo- α -[2-(1-piperidinyl)ethyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

CH2- CH2- NMe2

639808-88-1 CAPLUS 6H-Isoindolo(2,1-a)indole-11-ethanamine, 2-bromo-N,N-dimethyl- (9CI) (CA INDEX NAME)

639808-89-2 CAPLUS 6H-Isoindolo[2,1-a]indole-ll-ethanamine, 4-bromo-N,N-dimethyl- (9CI) (CA INDEX NAME)

сн₂ -- сн₂ -- мме₂

639808-90-5 CAPLUS 6H-Isoindolo[2,1-a]indole-11-ethanamine, 4-fluoro-N,N-dimethyl- (9CI)

INDEX NAME)

CH2-CH2-NMe2

639808-91-6 CAPLUS 6H-TBOindole, 2-bromo-11-{2-(4-methyl-1-piperazinyl)ethyl]-(5C) (CA INDEX NAME)

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 639809-23-7 CAPLUS
CN 6H-Isoindolo[2,1-a]indole-ll-ethanamine,
2-chloro-N-cyclopropyl-N-methyl-,
2-hydroxy-1,2,3-propanetricarboxylate (9CI) (CA INDEX NAME)

CRN 639809-22-6 CMF C21 H21 C1 N2

СМ

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

639809-25-9 CAPLUS
6H-Isoindolo[2,1-a]indole-11-ethanamine, N-cyclopropyl-2-fluoro-N-methyl-(9CI) (CA INDEX NAME)

639809-27-1 CAPLUS Acetamide, N-acetyl-N-[2-(3-chloro-4-methyl-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

639809-29-3 CAPLUS Acetamide, N-[2-13-chloro-4-methyl-6H-isoindolo[2,1-a]indol-11-yl]ethyl]-(SCI) (CA INDEX NAME)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 639809-32-8 CAPLUS CN Acetamide, N-[2-(3-chloro-2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]-(9CI) (CA INDEX NAME)

639809-35-1 CAPLUS Acetamide, N-[2-[2-(aminosulfonyl)-3-chloro-6H-isoindolo[2,1-a]indol-11-yl|ethyl|- (9CI) (CA INDEX NAME)

639809-38-4 CAPLUS Acetamide, N-[2-(3-iodo-2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]-(9CI) (CA INDEX NAME)

639809-39-5 CAPLUS 6H-Isoindolo(2,1-a)indole-11-ethanamine, 3-chloro-N,4-dimethyl- (9CI)

INDEX NAME)

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 639809-41-9 CAPLUS CN Acetamide, N-[2-(3-chloro-4-methyl-6H-isoindolo[2,1-a]indol-11-yl)ethyl]-N-methyl-(9Cl) (CA INDEX NAME)

639809-42-0 CAPLUS 6H-Tsoindolo(2,1-a)indole-11-ethanamine, 3-chloro-2-methoxy-N-methyl-(9CI) (CA INDEX NAME)

639809-44-2 CAPLUS 6H-Isoindolo[2,1-a]:ndole-2-sulfonamide, 3-chloro-11-[2-(methylamino)ethyl]- (9CI) (CA INDEX NAME)

639809-46-4 CAPLUS 6H-Isolndole(2,1-a|indole-11-ethanamine, 3-iodo-2-methoxy-N-methyl- (9CI) (CA INDEX NAME)

(Continued)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

СН2-СН2- NHMe

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:2617 CAPLUS
DOCUMENT NUMBER: 140:77023
ITILE: Preparation of novel tetracyclic arylcarbonyl indoles having serotonin receptor affinity
Jasti Venkateswardur Mainakrishina, Venkate Satya
Nirggir Kambhampati, Rama Sastri; Battula, Silhivasa
YEddy; Rao, Venkata Satya Veerabhadra Vadlamudi
Suven Pharmaceuticals Ltd., India; Suven Life PATENT ASSIGNEE(S): Ltd.
PCT Int. Appl., 63 pp.
CODEN: PIXXD2
Patent
English
1 SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. PATENT NO.

WO 2004000205
W: AE, AG, AL,
CO, CR, CU,
GM, HR, HU,
LS, LT, LU,
PL, PT, RO,
UG, US, UZ,
RW: GH, GM, KE,
KG, KZ, MD,
FI, FR, GB,
BF, BJ, CF,
CA 2490002
AU 2003249583
BR 20031012174
CN 1665815
JP 2005537239
US 2005250834
PRIORITY APPLN. INFO:: A2 20031231
A3 200408
AM, AT, AU, AZ,
CZ, DE, DK, DM,
ID, IL, IN, IS,
LV, MA, MD, MG,
RU, SD, SE, SG,
VN, YU, ZA, ZM,
LS, MW, MZ, SD,
RU, TJ, TM, AT,
GR, HU, IE, IT,
GR, HU, IE, IT,
GG, CI, CM, GA,
AA 20031231
A1 2004106
A 2005005
A 2005007
T2 20051208
A1 20051110 WO 2003-IN223 20030619 WO 2003-IN223 OTHER SOURCE(S): MARPAT 140:77023

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



The title compds. [1: R1-R12 = H, halo, oxo, thio, etc.: or the adjacent groups like R1 and R2, etc. together with carbon atoms to which they are attached may form 5-7 membered ring which may further contain one or more double bonds and/or one or more heteroatoms such as O, N, S or Se: or R9 and R10 or R11 and R12 together with the carbon atoms to which they are attached may form a 3-6 membered ring which may further contain one or more double bonds and/or one or more heteroatoms such as O, N, S or Se: R13 and R14 = H, alkyl. cycloalkyl, aryl, etc.: or RR13R14 = 3-7 membered heterocyclyl: n = 1-8], useful for treating conditions where a modulation of 5-HT and/or serotonin activity is desired (no data), were prepared

reacting 1-{2'-bromobenzoyl}-N,N-dimethyltryptamine with N,N-dimethylacetamide in the presence of PdCl2[P(o-tolyl]3]2 and AcOK afforded l1-(2-N,N-dimethylaminoethyl)-6H-isoindol(2,1-a)indol-6-one. This invention also relates to processes for preparing the compds. I,

This invention also relates to processes for preparing the compds. I, compons. containing effective amts. of the compound I and the use of such a compound/composition in therapy.

16 39805-04-2P 639805-08-6P 639805-09-PP 639805-09-PP 639805-01-9P 639805-10-0P 639805-11-1P 639805-12-2P 639805-13-3P 639805-13-3P 639805-13-3P 639805-13-3P 639805-13-3P 639805-12-3P 639805-12-3P 639805-22-4P 639805-22-4P 639805-22-4P 639805-22-4P 639805-22-4P 639805-23-4P 639805-26-3P 639805-26-3P 639805-25-0P 639805-25-0P 639805-51-3P 639805-55-4P 639805-55-4P 639805-55-64 P 639805-55-69805-55-6P 639805-55-9P 639805-66-0P 639805-66-4P 639805-66-0P 639805-66-4P 639805-66-4P 639805-66-4P 639805-66-4P RIP 639805-66-2P 639805-66-4P RIP 639805-66-2P 639805-66-4P RIP PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Usea)

(Uses) (preparation of isoindolo[2,1-a]indolones having serotonin receptor affinity) (1975) (

CH2-CH2-NMe2

ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

639805-05-3 CAPLUS 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino]ethyl]-2-fluoro-(9C1) (CA INDEX NAME)

639805-06-4 CAPLUS 6H-Isoindolo[2,1-a]indol-6-one, ll-[2-(dimethylamino)ethyl]-2-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)

● HC1

639805-07-5 CAPLUS 6H-Isoindolo(2,1-a)indol-6-one, 11-{2-(dimethylamino)ethyl}-2-fluoro-, (22)-2-butenedioate (9CI) (CA INDEX NAME)

CRN 639805-05-3 CMF C19 H17 F N2 O

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CH2-CH2-NMe

CM 2 CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

HO2C Z CO2H

RN 639805-08-6 CAPLUS
CN Butanediola caid, hydroxy-, compd. with 11-[2-(dimethylamino)ethyl]-2fluoro-6H-isoindolg[2,1-a]indol-6-one [9CI] (CA INDEX NAME)

CM 1 CRN 639805-05-3 CMF C19 H17 F N2 O

CH2+CH2-NMe2

CM 2 CRN 6915-15-7 CMF C4 H6 O5

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued

CH2-CH2-NMe2

CM 2

CRN 77-92-9

CO₂H | | HO₂C -- CH₂-- CO₂H

RN 639805-11-1 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 2-bromo-11-[2-(dimethylamino)ethyl)(9CI)
(CA INDEX NAME)

CH2-CH2-NMe2

RN 639805-12-2 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 2-chloro-11-[2-(dimethylamino)ethyl](9CI) (CA INDEX NAME)

CH2-CH2-NMe2
C1

RN 639805-13-3 CAPLUS
CN 6H-Isoindolo[2, 1-a]indol-6-one, 4-chloro-11-[2-(dimethylamino)ethyl](9C1) (CA INDEX NAME)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

он | | | но₂с- сн- сн₂- со₂н

RN 639805-09-7 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino)ethyl]-2-fluoro-, ethanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 639805-05-3 CMF C19 H17 F N2 O

CH2-CH2-NMe2

CM 2

CRN 144-62-7 CMF C2 H2 O4

о о || || но-с-с-он

RN 639805-10-0 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino)ethyl1-2-fluoro-, 2-hydroxy-1,2,3-propanetricarboxylate (9C1) (CA INDEX NAME)

CM 1

CRN 639805-05-3 CMF C19 H17 F N2 O

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CH2-CH2-NMe2

RN 639805-14-4 CAPLUS CN 6H-Isoindol(2,1-a)indol-6-one, 11-[2-(dimethylamino)ethyl]-2-methyl-(9C1) (CA INDEX NAME)

CH2-CH2-NMe2

RN 639805-15-5 CAPLUS
CN 6H-Isoindolo[2,l-a]indol-6-one, 11-[2-(dimethylamino)ethyl]-2-methoxy(9C1) (CA INDEX NAME)

CH2-CH2-NMe2

RN 639805-16-6 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino)ethyl]-4-methoxy(901) (CA HOREX NAME)

CH2-CH2-NMe2

RN 639805-17-7 CAPLUS CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino)ethyl]-4L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) (trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 639805-18-8 CAPLUS CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino)ethyl]-4-ethyl-(9CI) (CA INDEX NAME)

RN 639805-19-9 CAPLUS
CN 6H-Isoindolo(2,1-a]indol-6-one, 11-(2-(dimethylamino)ethyl]-2,4-difluoro(9CI) (CA INDEX NAME)

RN 639805-20-2 CAPLUS CN 6H-Isolndolo(2,1-a)indol-6-one, 2,4-dichloro-11-[2-(dimethylamino)ethyl]-(5C1) (CA 1NDEX NAME)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 639805-25-7 CAPLUS
CN 6H-Isolndolo[2,1-a]indol-6-one, 11-[2-(dimethylamino)ethyl]-3,4-dimethyl(9C1) (CA INDEX NAME)

RN 639805-26-8 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 1-chloro-11-[2-(dimethylamino)ethyl]-4methyl- (9CT) (CA INDEX NAME)

RN 639805-27-9 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 3-chloro-11-[2-(dimethylamino)ethyl]-4-methyl- (9CI) (CA INDEX NAME)

RN 639805-28-0 CAPLUS CN 6H-Isoindol(2,1-a)indol-6-one, 11-[2-(dimethylamino)ethyl]-4-methyl-(9CI) (CA INDEX NAME) L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 639805-21-3 CAPLUS CN 6H-Isoindol(2,1-a]indol-6-one, 3,4-dichloro-11-[2-(dimethylamino)ethyl]-(9CI) (CA INDEX NAME)

RN 639805-22-4 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 1,2,4-trichloro-11-[2-(dimethylamino)ethyl]- (9CI) (CA INDEX NAME)

RN 639805-24-6 CAPLUS CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-(dimethylamino|ethyl]-2,4-dimethyl-(9C1) (CA INDEX NAME)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued

RN 639805-29-1 CAPLUS
CN 6H-Isoindolo[2,1-a]indol-6-one, 2-bromo-11-[2-(4-morpholiny1)ethy1](9CI)
(CA INDEX NAME)

RN 639805-30-4 CAPLUS CN 6H-Isoindol(2,1-a)indol-6-one, 2-bromo-11-[2-(4-methyl-1piperazinyl)ethyl]- (SCI) (CA INDEX NAME)

RN 639805-51-9 CAPLUS

(Continued)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 6H-Isoindolo[2,1-a]indol-6-one, 11-[2-[cyclopropylmethylamino)ethyl]-2fluoro- (9CI) (CA INDEX NAME)

RN 639805-52-0 CAPLUS 6H-Isoindolo(2,1-a)indol-6-one, 11-[2-(cyclopropylamino)ethyl]-2-fluoro-(9CI) (CA INDEX NAME)

RN 639805-53-1 CAPLUS
CN Acetamide, N-acetyl-N-[2-(2-methoxy-6-oxo-6H-isoindolo[2,1-a]indol-ll-yl)ethyll- (Cl INDEX NAME)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

RN 639805-54-2 CAPLUS
CN Acetamide, N-{2-(2-methoxy-6-oxo-6H-isoindolo[2,1-a]indol-11-yl)ethyl}(9CI) (CA INDEX NAME)

RN 639805-55-3 CAPLUS CN Acetamide, . N-acetyl-N-[2-(3-chloro-4-methyl-6-oxo-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 639805-56-4 CAPLUS
CN Acetamide, N-[2-(3-chloro-4-methyl-6-oxo-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (GC INDEX NAME)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 639805-57-5 CAPLUS
CN Acetamide, N-[2-(3-chloro-2-methoxy-6-oxo-6H-isoindolo[2,1-a]indol-11-y1)ethyl)- (9CI) (CA INDEX NAME)

RN 639805-58-6 CAPLUS CN Acetamide, $N-\{2-\{2^2-\{aminosulfonyl\}-3-chloro-6-oxo-6H-isoindolo\{2,1-a\}indol-11-yl\}ethyl\}-$ (9CI) (CA INDEX NAME)

RN 639805-59-7 CAPLUS
CN Acetamide, N-[2-(3-iodo-2-methoxy-6-oxo-6H-isoindolo[2,1-a]indol-11-y1]ethyl}-(9C1) (CA INDEX NAME)

RN 639805-60-0 CAPLUS
CN' 6H-Isoindolo[2,1-a]indol-6-one, 3-chloro-4-methyl-11-[2-

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) (methylamino)ethyl]- (9C1) (CA INDEX NAME)

RN 639805-61-1 CAPLUS
CN Acetamide, N-[2-(3-chloro-4-methyl-6-oxo-6H-isoindolo[2,1-a]indol-11yllethyll-N-methyl- (9CI) (CA INDEX NAME)

RN 639805-62-2 CAPLUS CN 6H-Isoindolo[2,1-s]indol-6-one, 3-chloro-2-methoxy-11-[2-(methylaminolethyl]- (9CI) (CA INDEX NAME)

RN 639805-63-3 CAPLUS CN 6H-Isoindolo(2,1-a)indole-2-sulfonamide, 3-chloro-11-[2-(methylamino)ethyl)-6-oxo- (9CI) (CA INDEX NAME)

(Continued)

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

639805-64-4 CAPLUS 6H-Isoindolo[2,1-a]indol-6-one, do-2-methoxy-11-[2-(methylamino)ethyl]-(9CI) (CA INDEX NAME)

ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CAPLUS Acetamide, N-{2-(6H-isoindolo(2,1-a}indol-li-yl)ethyl]- (9CI) (CA INDEX NAME)

263865-09-4 CAPLUS Propanamide, N-[2-(6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA CN INDEX NAME)

263865-11-8 CAPLUS L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:215250 CAPLUS DOCUMENT NUMBER: 138:362155

DOCUMENT NUMBER: TITLE:

Three-Dimensional Quantitative Structure-Activity Relationship Studies on Selected MT1 and MT2

Melatonin Receptor Ligands: Requirements for Subtype

Selectivity

AUTHOR (S):

and Intrinsic Activity Modulation Rivara, Silvia; Mor, Marco; Silva, Claudia; Zuliani, Valentina; Vacondio, Federica: Spadoni, Gilberto; Bedini, Annalida; Tarzia, Giorgio; Lucini, Valeria; Pannacci, Marilou; Fraschini, Franco; Plazzi, Pier Vincenzo

Bedini, Annalida: Tarzia, Giorgio; Ducini, Valeria; Pannacci, Marilou; Fraschini, Franco; Plazzi, Pier Vincenzo

CORPORATE SOURCE: Dipartimento Farmaceutico, Universita degli Studi di Parma, Parma, I-43100, Italy

SOURCE: Journal of Medicinal Chemistry (2003), 46(8), 1429-1439

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANOUAGE: Journal

LANOUAGE: Journal

LANOUAGE: Journal

LANOUAGE: Journal

AB The three-dimensional quant. structure-activity relation comparative mol. field anal. (3D-0SAR COMFA) approach was applied to some classes of melatonin (MLT) membrane receptor ligands, with the principal aim of exploring the correlation between their steric features and MT2-selective antagonism. Binding data obtained from cloned MT1 and MT2 receptor subtypes were used to develop 3D-0SAR models for agonists and for antagonists at the two receptor subtypes, looking for the structural requirements for receptor subtypes electivity. In particular, we superposed the compds. showing antagonist activity, or very low intrinsic activity at the GTPyS test, following the hypothesis that the occupation of an addnl. pocket positioned out of the plane of MLT is one of the major determinants for MT2 selectivity; the statistical models obtained confirmed this hypothesis. Structure-intrinsic activity relation studies, applied to a set of compds. homogeneously tested, allowed the identification of the structural features whose modulation shifts the behavior from that of the agonist to that of the antagonist. The pocket out of the plane of MLT was identified as one of the key features for obtaining selective MT2 antagonists. The reliability of our statistical models was further confirmed by the correct prediction of the pharmacol. behavior of some N-substituted melatonin derivs., which were prepared and tested on cloned receptor subtypes.

17 244160-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263865-10-9 263

ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

263865-12-9 CAPLUS Cyclobutanecarboxamide, N-{2-(6H-isoindolo[2,1-a]indol-11-y1)ethy1}-CN (9CI)

(CA INDEX NAME)

263865-13-0 CAPLUS Acetamide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

263865-14-1 CAPLUS
Propanamide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI)
(CA INDEX NAME)

ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

263865-15-2 CAPLUS
Cyclopropanecarboxamide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-y1)ethyl]- (9CI) (CA INDEX NAME)

263865-16-3 CAPLUS Acetamide, N-[2-(2-ethoxy-6H-isoindolo(2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

263865-17-4 CAPLUS Propanamide, N-[2-(2-ethoxy-6H-isoindolo[2,1-a]indol-11-y1)ethy1]- (9CI) (CA INDEX NAME)

L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

263865-18-5 CAPLUS Butanamide, N-[2-(2-ethoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

263865-19-6 CAPLUS
Cyclopropanecarboxamide, N-[2-(2-ethoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- [9CI] (CA INDEX NAME)

69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:10274 CAPLUS
DOCUMENT NUMBER: 136:64149
TITLE: 81soindolo[2,1-a]indoles or 5,6-dihydroindolo[2,1-a]isoquinolinesas subtype-selective melatonergics for therapeutic use
Therapeutic use
PATENT ASSIGNEE(S): Cognetix, Inc., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: PAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIND		DATE		APPLICATION NO.						DATE		
						-			******								
WO	2002000215				A1		20020103		WO 2001-US19958						20010622		
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	υz,
		VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM			
	RW:	GH,	GM,	KE.	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES.	FI.	FR.	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		BJ,	CF.	CG.	CI,	CM,	GΑ,	GN,	G₩,	ML,	MR,	NE,	SN,	TD,	TG		
US	US 2002040018				A1	20020404			US 2001-886609						20010622		
RITY	APP	LN.	INFO	. :					1	JS 2	000-	3041	69P		P 2	0000	623
										JS 2	001-	2646	95P		P 2	0010	130

R SOURCE(S): MARPAT 136:64149
The invention discloses the use of MT2 selective melatonergics as anticonvulsant agents and as analgesic agents. More specifically, the invention discloses the use of 6H-isoindolo[2,1-a]indoles or 5,6-dihydroindolo[2,1-a]isoquinolines which have melatonin agonist activity and which are selective for the MT2 receptor as anticonvulsant agents or analgesic agents. The invention further relates to the use of 5,6-dihydroindolo[2,1-a]isoquinolines and 6,7-dihydro-5H-benzo[c]azepino[2,1-a]indoles which have melatonin antagonist activity

which are selective for the MT2 receptor as pharmacol. tools for delineation of physiol. responses governed by MT2 receptor activation either by melatonin or selective agonists disclosed herein and for treatment of disorders associated with overprodn. of melatonin such as seasonal affective disorder (SAD) and shift work syndrome. Such

melatonin

tonin
antagonists are also useful for treating Parkinson's Disease.
263865-14-1, CGX 031-120
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(isoindoloindole derivs. and dihydroindoloisoquinoline derivs. as
subtype-selective melatonergics for therapeutic use)
263865-14-1 CAPUS
Propanemide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-y1)ethy1]- (9CI)
(CA INDEX NAME)

ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

244160-10-9, CGX 031139 263865-13-0, CGX 031133
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(phencyclidine-like behavior: isoindoloindole derivs. and
dihydroindoloisoquinoline derivs. as subtype-selective melatonergics
for therapeutic use)
244160-10-9 CAPLUS
Butanamide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-y1)ethyl]- (9CI)
(CA INDEX NAME)

263865-13-0 CAPLUS Acetamide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L5 ANSMER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:321177 CAPLUS
DOCUMENT NUMBER: 135:122368
12-Aryl indole NK1 receptor antagonists: optimization of the 2-Aryl ring and the indole nitrogen

substituent AUTHOR(S):

Dinnell, K.; Chicchi, G. G.; Dhar, M. J.; Elliott, J. M.; Hollingworth, G. J.; Kurtz, M. M.; Ridgill, M.

Rycroft, W.; Tsao, K.-L.; Williams, A. R.; Swain, C.

CORPORATE SOURCE:

J.
Department of Medicinal Chemistry, Merck, Sharp and Dohme Research Laboratories, Neuroscience Research Centre, Harlow, Essex, CM20 2QR, UK Bioorganic & Medicinal Chemistry Letters (2001), 11(9), 1237-1240 CODEN: BMCLE8; ISSN: 0960-894X Elsevier Science Ltd.
Journal English CASREACT 135:122368

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

Novel 2-aryl indole hNK1 receptor ligands were prepared utilizing

cross-coupling chemical of a late intermediate as a key step. Compds. with

high hNK1 receptor binding affinity and good brain penetration (e.g., I)

were synthesized.

IT 351216-15-4P 351216-16-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological)

logical study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (optimization of the aryl ring and the indole nitrogen substituent in aryl indole NKI receptor antagonists) 351216-15-4 CAPLUS

ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

351216-16-5 CAPLUS
Piperazine, 1-(2-methoxyphenyl)-4-{3-(2-methyl-6-oxo-6H-isoindolo{2,1-a}indol-11-yl)-1-oxopropyl}- (9CI) (CA INDEX NAME)

REFERENCE COUNT: THIS

THERE ARE 12 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2001:246308 CAPLUS DOCUMENT NUMBER: 155:70637 2-Actylindole-3-acetamides FPP-

CORPORATE SOURCE:

2-Arylindole-3-acetamides FPP-Competitive inhibitors

AUTHOR (S):

of farnesyl protein transferase
Trotter, B. W.; Quigley, A. G.; Lumma, W. C.; Sisko,
J. T.; Walsh, E. S.; Hämann, C. S.; Robinson, R. G.;
Bhimnathwala, H.; Kolodin, D. G.; Zheng, W.; Buser,

c.

A.; Huber, H. E.; Lobell, R. B.; Kohl, N. E.; williams, T. M.; Graham, S. L.; Dinsmore, C. J. Department of Medicinal Chemistry, Merck Research Laboratories, West Point, PA, 19486, USA Bioorganic & Medicinal Chemistry Letters (2001), 11(7), 865-869 CODEN: BMCLE8; ISSN: 0960-894X Elsevier Science Ltd. Journal

SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE: AB A series of

ISHER: Elsewier Science Ltd.
MENT TYPE: Journal
UAGE: English
A series of 2-arylindole-3-acetamide farnesyl protein transferase
inhibitors has been identified. The compds. inhibit the enzyme in a
farnesyl pyrophosphate-competitive manner and are selective for farnesyl
protein transferase over the related enzyme geranylgeranyltransferase-I.

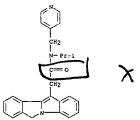
representative member of this series of inhibitors demonstrates equal effectiveness against HDJ-2 and K-Ras farnesylation in a cell-based assay when geranylgeranylation is suppressed. 347373-82-4P

IТ RL: BAC (Biological activity or effector, except adverse); BSU

logical
study, unclassified): SPN (Synthetic preparation): BIOL (Biological
study): PREP (Preparation)
(arylindole acetamides farnesyl pyrophosphate-competitive inhibitors

οf

farnesyl protein transferase) 347373-82-4 CAPLUS 6H-Isoindole[2,1-a]indole-11-acetamide, N-(1-methylethyl)-N-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

THERE ARE 24 CITED REFERENCES AVAILABLE FOR 24

L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 11
ACCESSION NUMBER:
2000:185117 CAPLUS
2000:185117 CAPLUS
132:273842

Mapping the Melatonin Receptor. 6. Melatonin Agonists and Antagonists Derived from 6H-Isoindolo[2,1-a]indoles, 5,6-0inhydroindolo[2,1-a]indoles, and 6,7-Dihydro-5H-benzo[c]azepino[2,1-a]indoles Faust, Ruediger; Garratt, Peter J.: Jones, Rob; Yeh, Li-Kuan; Tsotinis, Andrew, Panoussopoulou, Maria:
Calogeropoulou, Theodora: Teh, Muy-Teck; Sugden,

David CORPORATE SOURCE:

David

CORPORATE SOURCE:

Department of Chemistry, University College London,
London, WCIH ORJ, UK

SOURCE:

Journal of Medicinal Chemistry (2000), 43(6),
1050-1061

CODEN: JMCNAR; ISSN: 0022-2623

PUBLISHER:
American Chemical Society
Journal
ABOURCE:
English
AB 6H-Isoindolo[2.1-a]indoles, 5,6-dihydroindolo[2,1-a]isoquinolines, and
6,7-dihydro-5h-benzo[clarepino[2.1-a]indoles have been prepared as
melatonin
analogs to investigate the nature of the binding site of the melatonin
receptor. The affinity of analogs was determined in a radioligand

binding assay using cloned human mtl and MT2 receptor subtypes expressed in NIH 373 cells. Agonist and antagonist potency was measured using the pigment aggregation response of a clonal line of Xenopus laevis melanophores.

The

2-methoxyisoindolo[2,1-a]indoles showed much higher binding affinities
than the parent isoindoles and whereas 2-methoxyisoindolo[2,1-a]indoles
were agonists in the functional assay, its cyclopropanecarbonyl
derivative and
parent isoindoles were antagonists. The 2-ethoxyisoindolo[2,1-a]indoles
showed reduced binding affinities compared to their methoxy analogs,
while

while
the 5-chloro derivative showed a considerable reduction in binding
affinity and
potency compared to acetyl 2-methoxyisoindolo[2,1-a]indole compound The
10-methoxy-5,6-dihydroindolo[2,1-a]isoquinolines had higher binding
affinities than the corresponding parent indoloisoquinolines in the human
receptor subtypes, and the parent compds. were antagonists whereas the
10-methoxy derivs. were agonists in the functional assay. The
N-cyclobutanecarbonyl derivs. of both the parent and 10-methoxyl series
had similar binding affinities and were both antagonists with similar
potencies. The 11-methoxy-6,7-5H-benzo[c]azepino[2,1-a]indoles had
higher

potencies. The 11-metnoxy-b, renewal, relatively.

higher
binding affinities than the corresponding parent compds. at the MT2
receptor but similar affinities at the mtl site; all of the compds. were
antagonists in the functional assay. Changing 11-methoxy for 11-ethoxy
decreased the binding affinity slightly, and this was more evident at the
MTZ receptor. All of the derivs. investigated had either the same or a
greater affinity for the human MTZ receptor compared to the mtl receptor
(range 1:1-1:132). This suggests that the mtl and MTZ receptor pockets
differ in their ability to accommodate alkyl groups in the indole
nitroden

ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) region of the melatonin mol. Two compds. were tested in functional

ys
on recombinant mtl and MT2 melatonin receptors. N-butanoyl
2-(9-methoxy-6H-isoindolo[2,1-a]indol-11-yl]ethanamine was a potent
agonist with some selectivity (44-fold) for the MT2 receptor, while
N-butanoyl 2-(5,6,7-trihydro-11-methoxybenzo[c]cyclohept[2,1-a]indol-13yl]ethanamine was an MT2-preferring antagonist. Increasing the carbon
chain length between N-1 of indole and the 2-Ph group from n = 1 through

= 3 leads to a fairly regular decrease in the binding affinity, but, remarkably, when n = 3, it converts the methoxy compds. from melatonin agonists to antagonists. The Xenopus melatonin receptor thus cannot accommodate an N-n-alkyl chain attached to a 2-Ph substituent with n > 2 in the required orientation to induce or stabilize the active receptor conformation. $244160-10-9P\ 263865-08-3P\ 263865-19-9P\ 263865-11-9P\ 263865-11-9P$

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

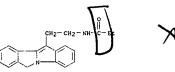
.ogica: study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (preparation and structure of melatonin agonists and antagonists

from isoindoloindoles, indoloisoquinolines, and benzoazepinoindoles) 244160-10-9 CAPLUS Butanamide, N-(2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

263865-08-3 CAPLUS Acetamide, N-{2-(6H-isoindolo{2,1-a}indol-11-y1)ethyl}- (9CI) (CA INDEX NAME)

H2-CH2-NHAC

RN CN INDEX 263865-09-4 CAPLUS Propanamide, N-{2-(6H-isoindolo[2,1-a]indol-11-yl)ethyl}- (9CI) (CA ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



263865-10-7 CAPLUS Butanamide, N-[2-(6H-isoindolo[2,1-a]indol-11-yl]ethyl]- (9CI) (CA INDEX NAME)

263865-11-8 CAPLUS Cyclopropanecarboxamide, N-[2-(6H-isoindolo[2,1-a]indol-11-y1)ethy1]-(9CI) (CA INDEX NAME)

263865-12-9 CAPLUS Cyclobutanecarboxamide, N-[2-(6H-isoindolo[2,1-a]indol-11-yl)ethyl}-(9CI) (CA INDEX NAME)

ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

263865-13-0 CAPLUS Acetamide, N-[2-12-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl}- (9CI) (CA INDEX NAME)

263865-14-1 CAPLUS Propanamide, N-(2-(2-methoxy-6H-isoindolo(2,1-a]indol-11-y1)ethy1]- (9CI) (CA INDEX NAME)

zosoo=ib=2 CAPLUS
Cyclopropanecarboxamide, N-[2-(2-methoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl)- (9CI) (CA INDEX NAME)

ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

263865-19-6 CAPLUS Cyclopropanecarboxamide, N-{2-(2-ethoxy-6H-isoindolo[2,1-a]indol-11-y1)ethyl}- (9CI) (CA INDEX NAME)

263865-20-9 CAPLUS Acetamide, N-{2-(2-chloro-6H-isoindolo{2,1-a}indol-11-y1)ethy1}- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 58 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

263865-16-3 CAPLUS Acetamide, $N-\{2-(2-ethoxy-6H-isoindolo\{2,1-a\}indol-11-y1\}ethyl\}-$ (9CI) (CA INDEX NAME)

263865-17-4 CAPLUS Propanamide, N-[2-(2-ethoxy-6H-isoindolo[2,1-a]indol-11-yl]ethyl]- (9CI) (CA INDEX NAME)

263865-18-5 CAPLUS Butanamide, h-[2-(2-ethoxy-6H-isoindolo[2,1-a]indol-11-yl)ethyl]- (9CI) (CA INDEX NAME)

L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:442966 CAPLUS
DOCUMENT NUMBER: 131:240681
TITLE: 2009:442968 Design of subtype selective melatonin receptor agonists and antagonists
AUTHOR(S): Sugden, David; Yeh, Li-Kuan; Teh, Muy-Teck
CORPORATE SOURCE: Physiology Division, GKT School of Biomedical

Science,

Science,

King's College London, London, W8 7AH, UK
SOURCE: Reproduction, Nutrition, Development (1999), 39(3),
335-344
CODEN: RNDEE5: ISSN: 0926-5287
PUBLISHER: Editions Scientifiques et Medicales Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Studies of the physiol. actions of melatonin have been hindered by the lack of specific, potent and subtype selective agonists and antagenists.
We describe the utility of a melanophore cell line from Xenopus laevis for

exploring structure-activity relationships among novel melatonin analogs and report a novel MT2-selective agonist (IIK7) and MT2-selective

and report a novel MTZ-selective agonist (IIK7) and MTZ-selective receptor receptor antagonist (K185). IIK7 is a potent melatonin receptor agonist in the melanophore model, and in NIH3T3 cells expressing human mtl and MTZ receptor subtypes. In radioligand binding expts. IIK7 is 90-fold selective for the MTZ subtype. K185 is devoid of agonist activity, but acts as a competitive melatonin antagonist in melanophores. A low concentration (10-9M) antagonizes melatonin inhibition of forskolin stimulation of cAMP in NIH3T3 cells expressing human MTZ receptors, but has no effect in cells

cells
expressing mtl receptors. In binding assays, K185 is 140-fold selective
for the MT2 subtype.

IT 244160-10-9
RL: BAC (Biological activity or effector, except adverse): BSU
(Biological

logical
study, unclassified); PRP (Properties); BIOL (Biological study)
 (melatonin analogs structure-activity relationship in frog melanophore
 and human melatonin receptors)
244160-10-9 CAPLUS
Butanamide, N-(2-(2-methoxy-6H-isoindolo{2,1-a}indol-11-y1)ethy1}- (9CI)
 (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 29 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN SSION NUMBER: 1993:662000 CAPLUS MENT NUMBER: 119:262000

ACCESSION NUMBER: DOCUMENT NUMBER:

119:262000
Chemistry, binding affinities, and behavioral properties of a new class of "antineophobic" mitochondrial DBI receptor complex (mDRC) ligands Kozikowski, A. P.; Ma, D.; Brewer, James; Sun, S.; Costa, E.; Romeo, E.; Guidotti, A. Mayo Found. Med. Educ. Res., Jacksonville, FL, 32224, USA TITLE: AUTHOR (S):

CORPORATE SOURCE:

Journal of Medicinal Chemistry (1993), 36(20),

SOURCE: 2908-20 CODEN: JMCMAR: ISSN: 0022-2623

DOCUMENT TYPE:

NAGE: English
The mitochondrial DBI (diazepam-binding inhibitor) receptor complex

C:
previously called the peripheral benzodiazepine receptors) is linked to
the production of neurosteroids such as pregnenolone sulfate,
dehydroepinadrosterone sulfate, and others. In order to gain further
information as to the function of the mDRC in the brain, the authors had
constructed and tested, both in vitro and in vivo, a novel series of
ligands, 2-arylindole-3-acetamides. The SAR studies detailed herein
delineate some of the structural features required for high affinity
binding to the mDRCs. In most cases the new ligands were prepared by
of

of the Fischer indole synthesis. Variations in the length and number of the alkyl groups on the amide nitrogen were probed together with the effects of halogen substituents on one or both of the aryl rings. Some ligands were also synthesized for study which represent conformationally constrained versions of the parent structure. Broad screening studies revealed these indoleacetamides to be highly selective for the mDRC,

they failed to bind with any significant affinity to other receptor systems. Some of the ligands were found to exhibit Ki values in the lonanomolar range for the mDRC as measured by the displacement of 138|4'-chlorodiazepam. A subset of these ligands was also shown to stimulate pregnenolone formation from the mitochondria of C6-2B glioma cells with an ECSO of about 3 mM. In animal expts. ligands selected fourther study were found to exhibit antineophobic effects, in spite of

fact that they exhibit no direct action on GABAA receptors.

fact that they exhibit no direct action on GABAA receptors.

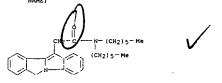
Consequently,

it is postulated that these ligands owe their action to an indirect
modulation of GABAA receptor function, presumably by stimulation of
neurosteroid production and release from glial cells, followed by
meturosteroid
modulation of GABA's action on the chloride ion channel conductance of
GABAA receptors.

IT 147375-21-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and mitochondrial diazepam-binding receptor complex
affinity

affinity
of, glial neurosteroid release and GABAA receptor function modulation
and antineophobic activity in relation to)
RN 147375-21-1 CAPLUS

ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) 6H-Isoindolo[2,1-a]indole-11-acetamide, N,N-dihexyl- (9CI) (CA INDEX NAME)



135966-96-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and mitochondrial diazepam-binding receptor complex

affinity
of, glial neurosteroid release and GABAA receptor function modulation
in relation to)
RN 135966-96-0 CAPLUS

6H-Isoindolo[2,1-a]indole-11-acetamide, N,N-dipropyl- (9CI) (CA INDEX

L5 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS ON STN
ACCESSION NUMBER: 1993:233860 CAPLUS
DOCUMENT NUMBER: 118:233880
TITLE: Preparation of the company of th

118:233880
Preparation of indolecarboxamides and methods of treating neurological and psychiatric disorders Costa, Erminio; Guidotti, Alessandro; Kozikowski, Alan; Ma, Dawel; Fidia - Georgetown Institute for the Neurosciences, USA
PCT Int. Appl., 55 pp.
CODEN: PIXXDZ
Patent INVENTOR (S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

Patent English COUNT: 1

FAMILY ACC. NUM. CO PATENT INFORMATION:

PATENT NO. PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9300334 AT AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, NN, MM, NL, NO, PL, RO, RU, SD, SE, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CG, CG, CM, GA, GN, ML, MR, SN, TD, TG

US \$206382 A1 19930427 US 1991-722196 19910627

AU 9222939 A1 19930427 US 1991-722196 19910627

AU 9222939 A1 199301616 EP 1992-914902 19920626

EP 546164 A1 19930165 EP 1992-914902 19920626

RE: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE

PRIORITY APPLN. INFO:: 19940127 JP 1993-501593 19920626

PRIORITY APPLN. INFO:: US 1991-722196 A 19910627 KIND DATE APPLICATION NO. A 19920626

OTHER SOURCE(S): MARPAT 118:233880

(CH2) nCONR1R2

AB Title compds. I [R1, R2 = H, C3-12 alkyl, (alkyl)aryl: R1R2 = 4-6-membered (un)saturated ring: R3, R4 = H, C1-12 alkyl, O2N, H2N, N3, cyano, halo,

RO2C,
RO, RS (wherein R = H, alkyl); A = Cl-3 alkylene to form a ring or null;

2
 = 0, NH, S, CH:CH; n = 1-3] or their salts are prepared PhNHNH2,
PhCOCH2CH2CO2H and H2SO4 in EtOH were refluxed for 24 h, cooled and
extracted
with Et2O to give Et 2-phenyl-3-indoleacetate which in 3N NAOH was
refluxed for 3 h, acidified with HCl and treated with Me(CH2)SHN2,
PhOP(0)(CliNHPh, and Et3N to give I (A = null, Z = CH:CH, R1 = R3 = R4 =
H, R2 = hexyl, n = 1). I showed anxiolytic action in rodents at 0.1-0.5

ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN mg/kg.
135966-96-0P 147375-21-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as drug for treatment of neurol. disorders and as antipsychotics)
135966-96-0 CAPIJUS
6H-Isoindolo[2,1-a]indole-11-acetamide, N,N-dipropyl- (9CI) (CA INDEX NAME)

147375-21-1 CAPLUS H-Isoindolo[2,1-a]indole-11-acetamide, N,N-dihexyl- (9CI) (CA INDEX HAME)

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

• STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT •

The synthesis of polycyclic indoles, e.g., I (X = 0, CH2), II, III, is shown to be accomplished readily by the palladium catalyzed intramol. cycliration of bromoarylindoles, e.g., IV, V, VI. 135966-96-0P
RLYSPN (Synthetic preparation); PREP (Preparation)
(preparation of)
135966-96-0 CAPLUS
6H-Isoindolo(2,1-al-indole-11-acetamide, N,N-dipropyl- (9CI) (CA INDEX SAMU OS TT/O NAME)